(iii) Departmental disciplinary proceedings have been initiated against the erring officials. Sometimes, the loss sustained by the Department is also recovered from the defaulting officials.

(iv) Registration sorting work has been computerised for Inland Registered Letters in some of the mail offices.

(v) A project of bar coding of all accountable International items has been taken up to ensure smooth processing of such articles and to have a track and trace system based on IPS software.

(vi) Computerisation of Airmail Offices, Foreign Post Offices and Sub Foreign Post Offices has been undertaken.

2576. **Withdrawn.**

Development of Indian Language Technology

2577. SHRI K. RAMA MOHANA RAO: Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:

(a) the details of programmes undertaken by Government for the development of Indian Language Technology;

(b) the allocation made for the purpose to these programmes during the last three years, year-wise; and

(c) the outcome of the programmes?

THE MINISTER OF STATE IN THE MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (SHRI SU. THIRUNAVUKKARASAR): (a) Department of Information Technology, Ministry of Communications and Information Technology has initiated Technology Development for Indian Language (TDIL) programme, which focuses on the following:-

- Machine Translation Systems
- Human Machine Interface Systems
- Language Processing Tools
- Localization
- Standardization
- Evaluation and Benchmarking

(b) Allocations made during the last three years are given below:-

Year 2000-01	Rs. 350.00 lakhs
Year 2001-02	Rs. 600.00 lakhs
Year 2002-03	Rs. 600.00 lakhs

(c) TDIL programme have developed various tools, softwares and systems in Indian Languages. The details are given below:-

Machine Translation System (MAT)

- Angla-Bharati English to Hindi
- Machine Translation System has been developed by IIT-Kanpur and their entire system is presently web-enabled at the site:http:// anglahindi.iitk.ac.in. Machine Translation Systems from Hindi to English and bi-directional systems between English and other Indian Languages are in process of development.

Optical Character Recognition System (OCR)

- Optical Character Recognition System with more than 97% accuracy has been developed for seven Indian Languages : Hindi, Marathi, Bangla, Tamil, Telugu, Punjabi, Malayalam. The OCR technologies for other Indic scripts are in the advanced stages of development.

Corpora

- 3 Million words corpora for each language and 450,000 pages of parallel corpora in 11 languages are ready. These are useful for Natural Language Processing activities.

Spell Checker

- Spell Checkers is used in Word Processor, MAT, OCR etc. Spell Checker for Hindi, Marathi, Bangla, Tamil, Telugu, Punjabi, and Malayalam have been developed, while for remaining Indian Languages, they are in advanced stages of development.

Word Processors

- Word processors for all major Indian Languages have been developed.

Linux systems in Indian Languages

- INDIX system, LINUX for Devanagari script is ready. LINUX operating system with other Indian Language support is also in advanced stages of development.

Standardization

Feedback in consultation with respective State Governments on the UNICODE for Indian Languages is communicated to UNICODE Technical committee from time to time.

Information Dissemination

(i) TDIL Web site : http://tdil.mit.gov.in

The TDIL website is bi-lingual (English and Hindi) and contains information about the TDIL Programme, it's initiatives and achievements. The website also provides various downloadable softwares and tools in Indian Languages. The unique services provided by the website include, E-mail in Hindi and Online Machine Translation from English to Hindi.

(ii) Vishwabharat@tdil : The quarterly publication Vishwabharat@tdil consolidates in one place information about products, tools, services, activities, developments, achievements in the area of Indian Language software.

Decrease in BSNL/MTNL land line market

2578. SHRI SURESH KALMADI: Will the Minister of COMMUNICATIONS AND INFORMATION TECHNOLOGY be pleased to state:

(a) whether Government are aware of the losing grip on the Indian Market by the country's major landline operators, both BSNL and MTNL during the last two years;

(b) if so, the steps taken by Government to improve the situation; and

(c) the details of the competitive approach adopted by the BSNL and MTNL in relation to the private operators who have been reducing their tariff rates continuously?

THE MINISTER OF STATE IN THE MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (SHRI ASHOK PRADHAN): (a) In a multi-operator and competitive scenario, churning of customers is a normal phenomenon. However, BSNL and MTNL continue to remain leaders in landline market. As on 30-06-2003, the subscriber base of two PSUs was 403.68 lakh landlines (wired + WLL) as compared to total of 31.77 lakh landlines wired + WLL) of private operators.

(b) and (c) BSNL and MTNL have taken several steps to stay competitive, including improving reliability of telecom services with focus on customer satisfaction, providing whole range of telecom services, including value added services and offering competitive tariffs with a number of alternative packages to meet differing needs and usage patterns of their customers.